

## ABSTRACT OF THE DISCLOSURE

A demodulation apparatus for a base station of a CDMA mobile communication system is provided, having an analog-to-digital converter device to convert an intermediate frequency signal into a digital signal and provide a quadrature component and an in-phase component of the digital signal, a plurality of filters to filter the components of the digital signal in the low pass band respectively, and a CDMA modem to demodulate the outputs of the plurality of filters. Since direct control by the digital signal of the base-band I channel and Q channel at the intermediate frequency can be performed and the analog-to-digital converter simultaneously performs the QPSK demodulation and the analog-to-digital conversion, the circuit design can be simplified and the characteristics reducing the noise can be obtained.